NameFLOW developments as reported in The Works of DANTE – 1994 - 2000

June 1994 - NAMEFLOW: ANOTHER DANTE FLOWSERVICE

NameFLOW is the successor to the PARADISE Project, which was part of the EUREKA COSINE Project, and had the remit to pilot a coordinated international directory service for the European Research Community. DANTE will take on the challenge of transforming the pilot into an operational service.

In parallel with the provision of the service DANTE will - in cooperation with its customers - define a strategy for the future development of international directory services. Opinions on this issue vary considerably within the European research community.

May 1995 - NAMEFLOW-PARADISE LAUNCHES X.500(93) PILOT

In March 1995 participants in the NameFLOW-Paradise international X.500 directory service decided to launch a pilot to test the 1993 edition of the X.500 standard. The short term goal of the pilot is to gain experience with 1993 compliant implementations to pave the way for a full scale X.500(93) service next year, allowing more software vendors to participate. The transition is a necessary step towards the creation of a more universal directory.

The pilot will comprise two phases. The first phase will be a small pilot covering three European countries, where 93 conformant services will be run in parallel with the current Quipu based service. This phase is planned to start in May 1995 and will continue until the end of August 1995. The initial organisations involved are DANTE, UKERNA (United Kingdom Education and Research Network Association) who will test the software in their organisation, SURFnet (Dutch national research network) and SWITCH (Swiss national research network) who will be performing tests nationally, while ULCC (University of London Computing Centre, currently operating the NameFLOW-Paradise service) will test a top level (international) service. The ISODE Consortium and NEXOR are the first two vendors to make their X.500(93) products available to the pilot participants.

February 1998 - NAMEFLOW LDAP PILOT

A small core group of NameFLOW customers are currently working with DANTE to develop a project plan for an LDAPv3 based directory pilot which will be run during the course of 1998. The intention is that providing the Pilot proves successful, the NameFLOW directory infrastructure will migrate to being LDAP based.

The strategy to move towards LDAP was decided after the second X.500(93) interoperability test campaign in May/June 1997 failed to provide the evidence that X.500(93) directory products provide the functionality and degree of interoperability at a price NameFLOW customers found acceptable.

June 1998 - NameFLOW

An LDAP (Lightweight Directory Access Protocol) pilot meeting organised by DANTE took place in London at the end of May with 15 very active participants. The goal of the pilot is to allow LDAP servers as stand alone directory islands to interconnect with each other to create a distributed global directory. It was decided that additionally to this pilot a reliable hybrid service should be built up, where a new X.500 backbone will be connecting the current X.500 infrastructure with LDAP servers. The Indexing part of the work proposed in the pilot will be done as part of the DESIRE II project. DESIRE II aims to build large scale information networks for the European research community. DANTE was asked to join the DESIRE II project as a result of its extensive experience in the area of directories and will be working on the provision of a directory service based on LDAP index servers and distributed indices.

August 1998 - NameFLOW PROGRESSING STEADILY

The LDAP (Lightweight Directory Access Protocol) indexing work done within the DESIRE II project in co-operation with the Dutch national research network SURFnet and the University of Brunel is progressing. The DESIRE II project aims to build large scale information networks for the European research community. During the last meeting of the IETF (Internet Engineering Task Force) working group "LDAP Service and Deployment" in Chicago in August the current concept of the index system was presented by DANTE followed by a fruitful discussion on directory indexing.

October 1998 - NAMEFLOW SERVICES MOVE TO DANTE

Since 1995 the University of London Computer Centre (ULCC) has successfully provided most of the operational components of the NameFLOW Directory services to the European research community on behalf of DANTE. With effect from 1 January 1999, however, DANTE will commence to run the NameFLOW services in house.

Most services currently provided by ULCC will be upheld. These include the Root DSA (Directory System Agent) management, the demonstrational LDAP (Lightweight Directory Access Protocol) server connection to the UK First Level DSA with statistics, the NameFLOW mailing list management, an FTP information server and a help desk. DANTE intends to discontinue the gopher information service by the end of 1998, due to very little usage.

DANTE will uphold the above mentioned services until the end of 1999, when we expect them to be replaced by new NameFLOW services based on new technologies. The development of these new services is currently in progress.

February 1999 - NameFLOW MEETING

On January 18 DANTE organised a NameFLOW meeting at the SURFnet Office in Utrecht. After reports on statistics and the transfer of the NameFLOW services to DANTE, the PGP-Directory Initiative and the DESIRE II LDAP indexing work, a proposal for the Hybrid X.500(93)-LDAP (Lightweight Directory Access Protocol) infrastructure was discussed, and a group for testing such an infrastructure formed. Other parts of the agenda were reports by the national research networks of Belgium, Germany, Greece, the Netherlands, Sweden, Switzerland and the United Kingdom, as well as the ITU (International Telecommunications Union) work for the 2000 version of the X.500 standard and the LDAP to Web gateway implementation TWEB (Tuebinger Webgateway).

December 1999 - NameFLOW UPDATE

NameFLOW is still based on the X.500 model largely using Quipu servers. DANTE maintains the root level with information on all First-Level servers and countries. All references to the country-level databases unavailable for several months were removed together with the corresponding country entries. 17 country entries remain, of which two (Great Britain and Hungary) are mastered now by Giant Tortoise.

An experimental LDAP gateway to the X.500 service was installed at ldap.dante.net:1389. It is open for the user "cn=LDAP Gateway, o=DANTE, c=GB" (without a password). The WWW gateway to the Directory was set up at the DANTE directory page.

DANTE is migrating to the '93 edition of the X.500 Directory standard. The evaluation copy of a new directory software was installed on a separate server and is being set up for maintaining the coordination information for country-level servers. The new server is working in parallel

with the old one. There is the work in progress on integration between the old Quipu-based country-level servers and the new X.500 (93) servers, as well as LDAP-only servers.

DANTE is planning to hold an open meeting on NameFLOW in January, to discuss the questions of the current national activities in the directory area,'93 migration and Quipu/LDAP interoperability.

January/February 2000 - NAMEFLOW UPDATE

In accordance with DANTE's Y2K policy (http://www.dante.net/y2k.html), the NameFLOW services, which until recently were based on software implementing the '88 version of the X.500 standard, has been migrated to a Y2K-compliant system during the last weeks of 1999.

A new central Directory server, based on the more recent '93 edition of the X.500 standard, which supports replication, was set up by DANTE and populated with necessary information. Both new and old servers worked in parallel during December 1999, making a smooth reconfiguration of national directory servers possible. 31 December 1999 was the last day that the old Quipu server was operational.

As part of the DIRECT project (http://www.terena.nl/projects/direct/), proposed by SURFnet and supported by TERENA, it has been agreed in early January that DANTE would provide the co-ordination between the X.500 directory and the national servers, most of which are moving to an LDAP-only solution.

The open meeting on NameFLOW announced in the last Works of DANTE took place in London on 20 January 2000. It was the occasion for us to clarify DANTE's role and activities. The X.500 replication prototype, which is the basis for the 3 directory models (X.500(93), Quipu, and LDAP) was also successfully demonstrated at this occasion.